

CLARK THE CONNECTED DEFIBRILLATOR



- ▶ **100% AUTOMATIC**
- ▶ **VOCAL AND VISUAL GUIDE**
- ▶ **AUTO SURVEILLANCE**
- ▶ **2G CONNECTIVITY**

IN SHORT

100% automatic : The Clark defibrillator is entirely automatic. Once the electrodes are attached to the victim's chest, Clark alone analyzes the cardiac rhythm and decides what therapy to deliver.

Vocal and visual guide : After pressing the ON button, the defibrillator vocally guides the user step by step. Visual instructions are located directly on the defibrillator and the electrodes packet.

Auto surveillance : Clark completes auto-tests daily, weekly, or monthly to check the device's capabilities, batteries and electrodes.

2G connectivity : The defibrillator connects to 2G. **2G covers 98% of the territory (higher than other existing solutions).** The connectivity, that lasts only a few seconds per week, allows for remote performance monitoring and alerts at the slightest anomaly. During normal operation the defibrillator connects and sends a status report every week. When an update is available, the connectivity allows the defibrillator to update remotely.

Clark is a new generation of connected Automated External Defibrillators (AED) created by Lifeaz. An Automated External Defibrillator (AED) is a medical device made to use on a victim of cardiac arrest to restore a normal cardiac rhythm.

A person in cardiac arrest is unconscious and not breathing. It's a vital emergency that requires intervention within the first few minutes.

Vocal guide for CPR : The defibrillator instructs the user how to perform CPR and emits a beep that is easy to follow for the rhythm of CPR.

Bilingual : The defibrillator starts in the default language and can switch to english at the push of a button.

Adult/Child modes : The adult mode is chosen by default. Easily switch to child mode at the push of a button, without having to change the electrodes.

5 year warranty : Supported by a 5 year warranty.

Remote defibrillator monitoring : Supervision of Clark on the Lifeaz app or back-office (depending on the offer).

CLARK'S TECHNICAL SPECIFICATIONS

DEFIBRILLATOR

Wave : Exponential Biphasic Wave shortened with fixed energy (determined by victim's impedance to defibrillation).

Victim defibrillation impedance : 25 - 175 Ohm (Ω)

Shock energy sequence : Energy sequences at 150 Joules in the adult mode and 50 Joules in the child mode.

Shock decision algorithm : An ECG analysis system (algorithm owner Rhythm Analysis Algorithm - RAA) gives an automatic decision for what therapy and shock to deliver.

Responding to the rhythm recognition criteria specified in the norm IEC 60601-2-4.

Charge time : Less than 8 seconds with a full battery.

Asystole threshold : Less than 0,2mV.

Warranty : 5 years.

USER INTERFACE

ON/OFF BUTTON : Battery control for the device.

Language button : The local language is the default language. Buttons let you switch to English or the local language respectively.

Adult/child mode button : Allows the user to change to child mode to reduce the shock's energy.

LED and buzzer for device's state : Visual LED indication (Green, Orange, Red), audible buzzer indicating systems operations (device, electrodes, battery) and vocal guide.

LEDS and visual indications for use :

Easy to use in just 3 easy steps :

1. Place the electrodes
2. Analysis and shock delivery
3. CPR (guide for chest compressions)

ENVIRONMENTAL CHARACTERISTICS

Operating temperature : 0 to 50 °C

Storage temperature : -20 °C to +60 °C without battery and electrodes.

Long term storage : Always store the defibrillator with the battery and electrodes in the recommended temperature range, between 5° and 35 °C.

Atmospheric pressure : 700hPa to 1060hPa.

Relative humidity : 20 to 80 % (without condensation).

Water and dust resistance : IEC 60529/EN 60529 IP54 with electrodes connected and battery installed.

Shock and vibrations : Conforms to norms IEC 60601 -1 and IEC 60601-1-11.

Electrical protection : Parts protected from high tension defibrillation conforming to norm CEI 60601 -1/EN 60601-1.

Security classification : Internal power supply. IEC 60601-1/EN 60601-1.

DIMENSIONS

Dimensions and weight with electrodes and battery included :

Height : 7,5 cm

Length : 21 cm

Width : 21 cm

Weight : 1,3 kg

ACCESSORIES

BATTERY

Type : Lithium manganese dioxide battery (Li/MnO₂), 18 V 1,4 Ah.

Capacity (20°C) : 50 guaranteed charges at 150 Joules minimum.

Battery life in standby mode : 4 years estimated. A new battery provides several years of standby power.

Signal for battery replacement : At least 3 shocks remaining at the first visual signal.

Weight : 110g

ELECTRODES

Universal pads for Adult/Child : Can be used on adult and pediatric patients.

Electrode surveillance : Signal if the electrodes are not correctly connected or in case the expiration date has passed.

Electrode condition : Packet with instructions for easy use.

Electrode replacement : Replace every 2.5 years. The electrodes should also be replaced in case of use.

Weight : 100g

DATA STORAGE

Memory type : Internal digital memory (flash RAM).

ECG storage : 90 minutes for ECG storage

COMMUNICATIONS

Communications : 2G and USB port.